Cardiogenic shock: Myocarditis

The clinical presentation of myocarditis is highly variable and myocarditis can mimic other non-inflammatory cardiac disorders. Therefore, a high level of clinical suspicion is needed. Myocarditis should be suspected in patients with or without cardiac signs and symptoms who have a rise in cardiac biomarkers (e.g. troponin), electrocardiographic changes suggestive of acute myocardial injury, arrhythmia, or abnormalities of cardiac function (typically on echocardiogram or cardiac magnetic resonance [CMR]), particularly if the clinical findings are new and unexplained.

Clinical features:

Excessive fatigue or exercise intolerance

Chest pain

ST

S3, S4

Abnormal ECG

Abnormal Echo

New cardiomegaly on CXR

Atrial or ventricular arrhythmia

Complete or incomplete heart block

New onset or worsening heart failure

Acute pericarditis

Cardiogenic shock

Sudden cardiac death

Respiratory distress/tachypnea

Hepatomegaly

Question:

A 24 year-old female presents acute onset chest pain, elevated troponin and new onset lateral ST depression on the ECG. Which of the following is most compatible with acute myocarditis?

a. Normal wall motion on the TTE
b. Undetectable troponin level
c. New onset LBBB
d. Elevated procalcitonin

Answer: C – see keyword above